

10006501234 0010  
CRF Error Corrected by the STIC Systems Branch

CRF Processing Date: 3/18/2002  
Edited by: AK  
Verified by: AK (STIC staff)

Serial Number: 10/069,434

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_.

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_.

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_

Other:

seq 1- corrected amino acid numbering

separated L1507 and L1517 responses

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



PCT10

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/069,434

DATE: 03/18/2002  
TIME: 18:15:06

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\03182002\J069434.raw

1 <110> APPLICANT: INCYTE GENOMICS, INC.  
2       THORNTON, Michael  
3       RAMKUMAR, Jayalaxmi  
4       TRIBOULEY, Catherine M.  
5       YUE, Henry  
6       NGUYEN, Dannie B.  
7       YAO, Monique G.  
8       PATTERSON, Chandra  
9       GANDHI, Ameena R.  
10      BURFORD, Neil  
11      THANGAVELU, Kavitha  
12      BAUGHN Mariah R.  
14 <120> TITLE OF INVENTION: HUMAN LYASES  
16 <130> FILE REFERENCE: PI-0137 PCT  
C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/069,434  
C--> 19 <141> CURRENT FILING DATE: 2002-02-20  
21 <150> PRIOR APPLICATION NUMBER: 60/213,383  
22 <151> PRIOR FILING DATE: 2000-06-23  
24 <150> PRIOR APPLICATION NUMBER: 60/215,544  
25 <151> PRIOR FILING DATE: 2000-06-30  
27 <150> PRIOR APPLICATION NUMBER: 60/222,818  
28 <151> PRIOR FILING DATE: 2000-08-04  
30 <160> NUMBER OF SEQ ID NOS: 6  
32 <170> SOFTWARE: PERL Program  
34 <210> SEQ ID NO: 1  
35 <211> LENGTH: 242  
36 <212> TYPE: PRT  
37 <213> ORGANISM: Homo sapiens  
39 <220> FEATURE:  
40 <221> NAME/KEY: misc\_feature  
41 <223> OTHER INFORMATION: Incyte ID No: 6338333CD1  
43 <400> SEQUENCE: 1  
44 Met Ser Arg Leu Ser Trp Gly Tyr Arg Glu His Asn Gly Pro Ile  
45        1                   5                   10                   15  
46 His Trp Lys Glu Phe Phe Pro Ile Ala Asp Gly Asp Gln Gln Ser  
47        20                   25                   30  
48 Pro Ile Glu Ile Lys Thr Lys Glu Val Lys Tyr Asp Ser Ser Leu  
49        35                   40                   45  
50 Arg Pro Leu Ser Ile Lys Tyr Asp Pro Ser Ser Ala Lys Ile Ile  
51        50                   55                   60  
52 Ser Asn Ser Gly His Ser Phe Asn Val Asp Phe Asp Asp Thr Glu  
53        65                   70                   75  
54 Asn Lys Ser Val Leu Arg Gly Gly Pro Leu Thr Gly Ser Tyr Arg

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Input Set : A:\PTO.AMC.txt  
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55	80	85	90
56	Leu Arg Gln Val His Leu His Trp Gly Ser Ala Asp Asp His Gly		
57	95	100	105
58	Ser Glu His Ile Val Asp Gly Val Ser Tyr Ala Ala Glu Leu His		
59	110	115	120
60	Val Val His Trp Asn Ser Asp Lys Tyr Pro Ser Phe Val Glu Ala		
61	125	130	135
62	Ala His Glu Pro Asp Gly Leu Ala Val Leu Gly Val Phe Leu Gln		
63	140	145	150
64	Ile Gly Glu Pro Asn Ser Gln Leu Gln Lys Ile Thr Asp Thr Leu		
65	155	160	165
66	Asp Ser Ile Lys Glu Lys Gly Lys Gln Thr Arg Phe Thr Asn Phe		
67	170	175	180
68	Asp Leu Leu Ser Leu Leu Pro Pro Ser Trp Asp Tyr Trp Thr Tyr		
69	185	190	195
70	Pro Gly Ser Leu Thr Val Pro Pro Leu Leu Glu Ser Val Thr Trp		
71	200	205	210
72	Ile Val Leu Lys Gln Pro Ile Asn Ile Ser Ser Gln Gln Leu Ala		
73	215	220	225
74	Lys Phe Arg Ser Leu Leu Cys Thr Ala Glu Gly Glu Ala Ala Ala		
75	230	235	240
76	Phe Leu		
79	<210> SEQ ID NO: 2		
80	<211> LENGTH: 460		
81	<212> TYPE: PRT		
82	<213> ORGANISM: Homo sapiens		
84	<220> FEATURE:		
85	<221> NAME/KEY: misc_feature		
86	<223> OTHER INFORMATION: Incyte ID No: 1415322CD1		
88	<400> SEQUENCE: 2		
89	Met Ala Gly Tyr Leu Ser Glu Ser Asp Phe Val Met Val Glu Glu		
90	1 5 10 15		
91	Gly Phe Ser Thr Arg Asp Leu Leu Lys Glu Leu Thr Leu Gly Ala		
92	20 25 30		
93	Ser Gln Ala Thr Thr Asp Glu Val Ala Ala Phe Phe Val Ala Asp		
94	35 40 45		
95	Leu Gly Ala Ile Val Arg Lys His Phe Cys Phe Leu Lys Cys Leu		
96	50 55 60		
97	Pro Arg Val Arg Pro Phe Tyr Ala Val Lys Cys Asn Ser Ser Pro		
98	65 70 75		
99	Gly Val Leu Lys Val Leu Ala Gln Leu Gly Leu Gly Phe Ser Cys		
100	80 85 90		
101	Ala Asn Lys Ala Glu Met Glu Leu Val Gln His Ile Gly Ile Pro		
102	95 100 105		
103	Ala Ser Lys Ile Ile Cys Ala Asn Pro Cys Lys Gln Ile Ala Gln		
104	110 115 120		
105	Ile Lys Tyr Ala Ala Lys His Gly Ile Gln Leu Leu Ser Phe Asp		
106	125 130 135		
107	Asn Glu Met Glu Leu Ala Lys Val Val Lys Ser His Pro Ser Ala		

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Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\03182002\J069434.raw

108	140	145	150
109	Lys Met Val Leu Cys Ile Ala Thr Asp Asp Ser His Ser Leu Ser		
110	155	160	165
111	Cys Leu Ser Leu Lys Phe Gly Val Ser Leu Lys Ser Cys Arg His		
112	170	175	180
113	Leu Leu Glu Asn Ala Lys Lys His His Val Glu Val Val Gly Val		
114	185	190	195
115	Ser Phe His Ile Gly Ser Gly Cys Pro Asp Pro Gln Ala Tyr Ala		
116	200	205	210
117	Gln Ser Ile Ala Asp Ala Arg Leu Val Phe Glu Met Gly Thr Glu		
118	215	220	225
119	Leu Gly His Lys Met His Val Leu Asp Leu Gly Gly Gly Phe Pro		
120	230	235	240
121	Gly Thr Glu Gly Ala Lys Val Arg Phe Glu Glu Ile Ala Ser Val		
122	245	250	255
123	Ile Asn Ser Ala Leu Asp Leu Tyr Phe Pro Glu Gly Cys Gly Val		
124	260	265	270
125	Asp Ile Phe Ala Glu Leu Gly Arg Tyr Tyr Val Thr Ser Ala Phe		
126	275	280	285
127	Thr Val Ala Val Ser Ile Ile Ala Lys Lys Glu Val Leu Leu Asp		
128	290	295	300
129	Gln Pro Gly Arg Glu Glu Glu Asn Gly Ser Thr Ser Lys Thr Ile		
130	305	310	315
131	Val Tyr His Leu Asp Glu Gly Val Tyr Gly Ile Phe Asn Ser Val		
132	320	325	330
133	Leu Phe Asp Asn Ile Cys Pro Thr Pro Ile Leu Gln Lys Lys Pro		
134	335	340	345
135	Ser Thr Glu Gln Pro Leu Tyr Ser Ser Ser Leu Trp Gly Pro Ala		
136	350	355	360
137	Val Asp Gly Cys Asp Cys Val Ala Glu Gly Leu Trp Leu Pro Gln		
138	365	370	375
139	Leu His Val Gly Asp Trp Leu Val Phe Asp Asn Met Gly Ala Tyr		
140	380	385	390
141	Thr Val Gly Met Gly Ser Pro Phe Trp Gly Thr Gln Ala Cys His		
142	395	400	405
143	Ile Thr Tyr Ala Met Ser Arg Val Ala Trp Glu Ala Leu Arg Arg		
144	410	415	420
145	Gln Leu Met Ala Ala Glu Gln Glu Asp Asp Val Glu Gly Val Cys		
146	425	430	435
147	Lys Pro Leu Ser Cys Gly Trp Glu Ile Thr Asp Thr Leu Cys Val		
148	440	445	450
149	Gly Pro Val Phe Thr Pro Ala Ser Ile Met		
150	455	460	
152	<210> SEQ ID NO: 3		
153	<211> LENGTH: 328		
154	<212> TYPE: PRT		
155	<213> ORGANISM: Homo sapiens		
157	<220> FEATURE:		
158	<221> NAME/KEY: misc_feature		

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/069,434

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TIME: 18:15:06

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\03182002\J069434.raw

159 <223> OTHER INFORMATION: Incyte ID No: 3267634CD1  
161 <400> SEQUENCE: 3  
162 Met Glu Ile Val Trp Glu Val Leu Phe Leu Leu Gln Ala Asn Phe  
163 1 5 10 15  
164 Ile Val Cys Ile Ser Ala Gln Gln Asn Ser Pro Lys Ile His Glu  
165 20 25 30  
166 Gly Trp Trp Ala Tyr Lys Glu Val Val Gln Gly Ser Phe Val Pro  
167 35 40 45  
168 Val Pro Ser Phe Trp Gly Leu Val Asn Ser Ala Trp Asn Leu Cys  
169 50 55 60  
170 Ser Val Gly Lys Arg Gln Ser Pro Val Asn Ile Glu Thr Ser His  
171 65 70 75  
172 Met Ile Phe Asp Pro Phe Leu Thr Pro Leu Arg Ile Asn Thr Gly  
173 80 85 90  
174 Gly Arg Lys Val Ser Gly Thr Met Tyr Asn Thr Gly Arg His Val  
175 95 100 105  
176 Ser Leu Arg Leu Asp Lys Glu His Leu Val Asn Ile Ser Gly Gly  
177 110 115 120  
178 Pro Met Thr Tyr Ser His Arg Leu Glu Ile Arg Leu His Phe  
179 125 130 135  
180 Gly Ser Glu Asp Ser Gln Gly Ser Glu His Leu Leu Asn Gly Gln  
181 140 145 150  
182 Ala Phe Ser Gly Glu Val Gln Leu Ile His Tyr Asn His Glu Leu  
183 155 160 165  
184 Tyr Thr Asn Val Thr Glu Ala Ala Lys Ser Pro Asn Gly Leu Val  
185 170 175 180  
186 Val Val Ser Ile Phe Ile Lys Val Ser Asp Ser Ser Asn Pro Phe  
187 185 190 195  
188 Leu Asn Arg Met Leu Asn Arg Asp Thr Ile Thr Arg Ile Thr Tyr  
189 200 205 210  
190 Lys Asn Asp Ala Tyr Leu Leu Gln Gly Leu Asn Ile Glu Glu Leu  
191 215 220 225  
192 Tyr Pro Glu Thr Ser Ser Phe Ile Thr Tyr Asp Gly Ser Met Thr  
193 230 235 240  
194 Ile Pro Pro Cys Tyr Glu Thr Ala Ser Trp Ile Ile Met Asn Lys  
195 245 250 255  
196 Pro Val Tyr Ile Thr Arg Met Gln Met His Ser Leu Arg Leu Leu  
197 260 265 270  
198 Ser Gln Asn Gln Pro Ser Gln Ile Phe Leu Ser Met Ser Asp Asn  
199 275 280 285  
200 Phe Arg Pro Val Gln Pro Leu Asn Asn Arg Cys Ile Arg Thr Asn  
201 290 295 300  
202 Ile Asn Phe Ser Leu Gln Gly Lys Asp Cys Pro Asn Asn Arg Ala  
203 305 310 315  
204 Gln Lys Leu Gln Tyr Arg Val Asn Glu Trp Leu Leu Lys  
205 320 325  
207 <210> SEQ ID NO: 4  
208 <211> LENGTH: 911  
209 <212> TYPE: DNA

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/069,434

DATE: 03/18/2002  
TIME: 18:15:06

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\03182002\J069434.raw

210 <213> ORGANISM: Homo sapiens  
212 <220> FEATURE:  
213 <221> NAME/KEY: misc\_feature  
214 <223> OTHER INFORMATION: Incyte ID No: 6338333CB1  
216 <400> SEQUENCE: 4  
217 cggattcgg ctcgagttcc accccgaggg accatgtcga ggctcagctg gggataccgc 60  
218 gagcacaacg gtccttattca ctggaaaggaa ttttcccta ttgctgtatgg tgatcagcaa 120  
219 tctccaattt agattaaaac caaagaagtg aaatatgact ctccctccg accacttagt 180  
220 atcaagtatg acccaagctc agctaaaatc atcagcaaca gcgccatc cttcaatgtt 240  
221 gactttgtatg acacagagaa caaatcagg tctgcgtggg gtcctctcac tggaaagctac 300  
222 agttacggc agttcacct tcaactgggg tccgctgtatg accacggctc cgagcacata 360  
223 gtagatggag tgagctatgc tgcagagctc catgttggtc actggaaattc agacaaaatac 420  
224 cccagctttt ttgaggcagc tcatgaacca gatggactgg ctgtcttggg agtgtttta 480  
225 cagattgggtt aacctaattc ccaactgc当地 aagattactg acactttgga ttcattaaa 540  
226 gaaaagggtt aaccaaactcg attcacaat tttgacat ttttgcgtat tccaccatcc 600  
227 tggactact ggacatatacc tggttctt acagttccac ctcttcttga gagtgtcaca 660  
228 tggattgttt taaagcaacc tataaacatc agctctcaac agctggccaa atttgcagt 720  
229 ctccctgtgc当地 cagcggaggg tgaaggcagca gttttctgt gatagagtct cactctgtca 780  
230 cccaggctgg agggcagtgg tacaatcttgc gctaatttgc当地 gcctccaact cctggactca 840  
231 agtgatcctc ccacccatc cttccagatc ctgaccactg gcatgacttt tccaaatgc当地 900  
232 cagggggaaa a 911  
234 <210> SEQ ID NO: 5  
235 <211> LENGTH: 2064  
236 <212> TYPE: DNA  
237 <213> ORGANISM: Homo sapiens  
239 <220> FEATURE:  
240 <221> NAME/KEY: misc\_feature  
241 <223> OTHER INFORMATION: Incyte ID No: 1415322CB1  
243 <400> SEQUENCE: 5  
244 gtggctgtgg ggctggcggg ggcgcaggccg cgggaccgc当地 gcccggggaa gcgagagagc 60  
245 ggaggcgc当地 aggatccat tcaactccctg gggagaccta tggggccgaaag ccgtgtaaaat 120  
246 gcttttaag cagaggcctc ggctccgc当地 ctgc当地 ctccctgggt gttcacaag 180  
247 tttcgaggc当地 accggcgc当地 ccccttagc当地 ggc当地 ctggccccc cgc当地 aggagg 240  
248 gacggagttt gtgtgttgc当地 tactttctaa ggc当地 cggct gcaaggccgg ctccatccag 300  
249 cccgtcagct cctccctgc当地 ggc当地 tggctgctg gtc当地 ctctgtag tgaatcggac tttgtgtatgg 360  
250 tggaggaggg cttcagttacc cggagacctgc当地 tgaaggaact cactctgggg gcctcacagg 420  
251 ccaccacggc当地 cgaggtagct gccttcttgc当地 tggctgaccc gggtgc当地 gtgaggaagc 480  
252 acttttgc当地 tctgaagtgc当地 ctgc当地 acagg tccgccc当地 ttatgtgtc aagtgc当地 aaca 540  
253 gcagccc当地 aggtgttgc当地 gttctggccc当地 agctggggct gggctttagc tggccaaaca 600  
254 aggcagagat ggagttggc当地 cagcatattg gaatccctgc当地 cagtaagatc atctgc当地 cca 660  
255 accccctgtaa gcaaatttgc当地 cagatcaat atgtgc当地 gcatgggatc cagctgtca 720  
256 gctttgacaa tgagatggag ctggcaaaagg tggtaaagag ccacccatg gccaagatgg 780  
257 ttctgtgc当地 tgctaccat gactccact ccctgagctg cctgagcttca aagtttggag 840  
258 tgtcaactgaa atcctgc当地 caccctgttgc当地 aaaatgc当地 gaaagcaccat gtggaggtgg 900  
259 tgggtgttag ttttccacatt ggc当地 agtggct gtc当地 ctgc当地 tcaaggccat gctcaatgttca 960  
260 tcgcagacgc ccggctcgat tttgaaatgg gcaccggatc gggctcacaag atgc当地 acgttca 1020  
261 tggaccttgg tggctgttgc当地 cttggccacag aaggggccaa agtgagat ttttggag 1080  
262 ctccctgtatc当地 caactcagcc ttggacctgttgc当地 acttccaga gggctgtggc gtggacatct 1140  
263 ttgttgc当地 qggggcgttac tacgtgaccc cggcccttgc当地 ttttggcaatq aqcatcattq 1200

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/069,434

DATE: 03/18/2002

TIME: 18:15:07

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\03182002\J069434.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date